NIST Image Group Open Source
(NIGOS)
June 15, 2006
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This document provides instructions for accessing a new service (NIGOS) provided by the NIST Image Group. An open source server has been set up to facilitate biometric technology transfer and collaboration through formal software management controls.

Initial access to NIGOS is provided as read-only as described below. Policies and procedures for issuing "developer" privileges and the ability to contribute to the open source projects through the source code server are currently being drafted. In the meantime, developer status will be considered on a case by case basis.

Current NIGOS Projects

- MBARK
  Email Contact: mbark@nist.gov
  Project View: //depot/projects/MBARK/Main/...
  Project Description:
  MBARK is a reference implementation for an externally deployable, multi-modal biometric acquisition and information system. MBARK may be used in operational settings to collect and maintain biometric data along with their defining characteristics.

- INCITS
  Project View: //depot/projects/INCITS/…
  Email Contact: wsalamon@nist.gov
  Project Description: The INCITS project contains libraries and programs used to read, write, and present minutiae records that conform to these ANSI INCITS standards:
  378-2004 Finger Minutiae Format for Data Interchange
  381-2004 Finger Image-Based Data Interchange Format
  385-2004 Face Recognition Format for Data Interchange
  Included is a program ('pivv') used to verify a fingerprint minutiae record that is used in a Personal Identity Verification (PIV) card. This program uses the M1 378-2004 libraries.
  See http://www.csrc.nist.gov/piv-program/index.html for details on the PIV program.

Accessing NIGOS

The NIST open source server uses the Perforce source code management system. To access the NIST server, you'll need to obtain a free Perforce client from:

www.perforce.com/perforce/loadprog.html

Also, read the Perforce introduction at:

www.perforce.com/perforce/doc.052/manuals/intro/intro.pdf

To obtain a copy of the source code from a UNIX or LINUX client, you must use the 'public' account to create a view of the Perforce depot. (Instructions may vary for Microsoft Windows users, but client software and documentation is available from Perforce.) Setting these environment variables will be needed:

P4USER=public
P4PASSWD=NISTPublic
P4PORT=nigos.nist.gov:1666

Then create a client view using the 'p4 client' command. You can use the default view to access the entire depot, or create a smaller view of just the source code projects of interest by changing the 'View:' clause to:

View:
//depot/projects/... //<client>/projects/...

where <client> will be the name of your client workstation, by default. You can override this by setting the P4CLIENT environment variable before running the 'p4 client' command. The client name shows up as the Client: clause in the view.

If you want, for example, just the MBARK primary development source code, set the View: to:

//depot/projects/MBARK/Main/... //<client>/projects/MBARK/Main/...

The view for INCITS M1 is:

//depot/projects/INCITS/M1/... //<client>/projects/INCITS/M1/...

Once you have the client view saved, you can obtain the source code by updating your client view, using the 'p4 sync' command. Note: Once you sync, the Perforce server will consider your view up to date, so another sync won't pull any more. If you want to sync again (if you deleted the client copy, for example), use the 'p4 sync -f' command, which forces a new retrieval from the depot.

NIGOS License:

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